

## CLAIMS

1. A briquette for use as steelmaking material comprising a dry briquette which contains a ferrous metal and which is formed by solidifying shot waste with a solidification assistant, the shot waste containing a ferrous powder metal and a great number of shot beads.
2. The briquette for use as steelmaking material according to Claim 1, wherein the shot beads are bonded to one another via the ferrous powder metal impregnated with the solidification assistant.
3. The briquette for use as steelmaking material according to Claim 1, containing the solidification assistant in an amount of 0.5 to 5wt%.
4. The briquette for use as steelmaking material according to Claim 1, further containing ferrous-metal cutting residue particles and oil.
5. The briquette for use as steelmaking material according to Claim 4, containing the shot waste in an amount of 5 to 25wt%.
6. The briquette for use as steelmaking material according to Claim 4, wherein the shot waste comprises shot beads formed from steel.
7. The briquette for use as steelmaking material according to Claim 1 or 4, wherein the solidification assistant is at least one selected from the group

consisting of sodium silicate, colloidal silica, aluminum phosphate and asphalt emulsion.

8. A method of manufacturing a briquette for use as steelmaking material comprising the steps of:

5        adding a solidification assistant to shot waste containing a ferrous powder metal and shot beads;        compression molding the shot waste admixed with the solidification assistant; and        drying the compression molded shot waste.

10    9. The method of manufacturing a briquette for use as steelmaking material according to Claim 8, further comprising a step of impregnating the solidification assistant into the shot waste, the step being interposed between the step of compression molding the shot waste and the step of drying the compression molded shot waste.

15    10. A method of manufacturing a briquette for use as steelmaking material comprising the steps of:

20        forming cotton-like agglomerations by admixing shot waste to cutting sludge containing ferrous-metal cutting residue particles and a cutting fluid containing oil and water;

25        compression molding the cotton-like agglomerations thereby forming a brittle compact of a predetermined shape, which has the fibrous cutting residue particles sheared and which is removed of

excessive water and oil;

impregnating a solidification assistant into the brittle compact; and

drying the brittle compact impregnated with the solidification assistant.

11. The method of manufacturing a briquette for use as steelmaking material according to Claim 10, wherein the shot waste is admixed in an amount of 10 to 30wt%.

12. The method of manufacturing a briquette for use as steelmaking material according to Claim 10, wherein the shot waste comprises shot beads formed from steel.

13. The method of manufacturing a briquette for use as steelmaking material according to Claim 8 or 10, wherein at least one selected from the group consisting of sodium silicate, colloidal silica, aluminum phosphate and asphalt emulsion is used as the solidification assistant.